



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,566	03/06/2001	Darrel Rowledge	X-9330	3859

7590 08/28/2002

John S Hale
Gipple & Hale
6665 A Old Dominion Drive
McLean, VA 22101

EXAMINER

POLK, SHARON A

ART UNIT PAPER NUMBER

2836

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/719,566

Applicant(s)

ROWLEDGE, DARREL

Examiner

Sharon Polk

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☒ Other: *Claims & Pre-amendment*.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to because figure 1, has multiple shading, and it is hard to see element 16, the light beam, and element 30, the road hazard. Also, figure 2 is an unnecessary duplicate of figure 4. Both contain the same references numbers. Further, figure 3 contains the same element numbers as in figures 2 and 4. Figure 3, does not add anything additional to aid in the understanding of the invention. Figure 2, lead line to element 19, gets lost in the shading. The examiner suggests choosing a lighter shade. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: Page 1 of the disclosure is missing. As filed, the specification begins on page 2, beginning with "or accepted, safe and reliable . . .". The description of figure 6, refers to element 18 as "a wire" and "a connection." For clarity, the examiner suggests choosing one name. Appropriate correction is required.

Claim Objections

4. Claims 1-21 are objected due to the confusion based upon dependency of the claims. It is noted that a preliminary amendment was filed (date assumed to be December 29, 2000), but it failed to cure **all** multiple dependencies. For examination purposes, the examiner chose the **first** of the group claims for dependency. For example, claim 6. *A cooperative advance warning system according to claims 3, 4, or 5 wherein the pre-determined frequency comprises a cadence.* Therefore, claim 6 was deemed dependent only upon claim 3. A copy of the claims has been provided, along with a copy of the preliminary amendments. Please clarify by amendment the dependent status of all of the claims.

Claims 1-21 are objected to because of the following informalities: The examiner is unsure how to interpret the word, *cooperative* so as to apply its significance to the claimed invention. The examiner requests that applicant provide an explanation to be included in the specification, or in the body of the claim. No new matter may be entered. Currently, the word has been given no patentable weight. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 5, (maybe 6-9 based upon dependency of claims 4-5), 16-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

Art Unit: 2836

particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner is not sure how the examples disclosed on pages 6-7, relate to claims 4 and 5. For example, how is the frequency of on and off flashed reduced over time to yield an inverse proportional relationship between the frequency between of the flashes *and the time interval since activation*. Further how does the frequency vary *depending on the length of time the lamp has been activated*? As understood, the Applicant is claiming basic mathematical relations between frequency and time. However, the examiner is not sure if applicant means to claim frequency in hertz or the fact or condition occurring frequently? (*Merriam Webster's Collegiate Dictionary* 10th Ed., pp. 466). The source of confusion stems from Applicant's disclosure, pages 6-7. At first, the examples indicated the use of the first definition, especially in light of the using frequency or cadence interchangeably. But then, the introduction of "while lower frequency. . . and still lower frequency. . ." indicates to the examiner that frequency in hertz is being claimed.

With regard to claims 16-21, what is meant by high frequency? What is considered to be a high frequency?

Regarding claims 16, 17, 20, and 21 are, the word "means" is preceded by nothing in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-9, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Adell, US 5,237,306.

With regard to **claim 1**, Adell teaches:

An advance warning system for use on a vehicle (40) to warn drivers of oncoming vehicles of an upcoming, unexpected road hazard comprising:

a lamp (48) mounted on the vehicle in a location where light emitted by the lamp is visible to drivers of the oncoming vehicles (col. 5, lines 8-10);

a switch means (61) connected to the lamp for activating and deactivating the lamp (col. 6, lines 6-8, col. 6, lines 43-44), the switch means mounted to the vehicle in a location that is easily accessible to the driver of the vehicle (fig. 27). It is noted that the examiner finds that Applicant's switch means performs the same function as Adell's control circuit; and

an electronic control means (72, col. 6, lines 27-28, fig. 33) connected to the lamp for controlling the characteristics of the light emitted by the lamp. The examiner finds that Applicant's control means performs the same function as Adell's control circuit 72.

With regard to **claim 2**, Adell teaches the electronic control means comprises means to automatically deactivate the lamp after a pre-determined period of time following activation (col. 6, lines 34-39).

With regard to **claim 3**, Adell teaches the electronic control means comprises means to cause the lamp to flash on and off at a pre-determined frequency (col. 6, lines 46-60).

With regard to **claim 6**, Adell teaches the pre-determined frequency comprises a cadence. The examiner agrees with assertion found in International Preliminary Examination Report (PCT/CA99/00598), EPO –April 1997 sheet 2, paragraph 5: If the term cadence were interpreted as being “the measure or beat of sound or movement” then cadence is inherent in the teaching of flashing on and off as claimed in claim 1. Further figure 32, shows flashing signals which are depicted as being at equivalent in duration.

With regard to **claim 7**, Adell teaches the electronic control means further comprises means to maintain the pre-determined frequency or cadence at a particular value for an indefinite period (col. 9, lines 66-68).

With regard to **claim 8**, Adell teaches an in-use indicator light (col. 6, lines 55-57) connected to the switch means and to the electronic control means for indicating to the driver of the vehicle when the advance warning system is operating.

With regard to **claim 9**, Adell teaches the color of light emitted by the lamp is selected from the group of colors consisting of fuchsia and pink (col. 7, lines 66-68, col. 8, lines 1-4).

With regard to **claim 19**, Adell teaches the rear-facing warning light remains flashing on and off only for a pre-determined period of time following activation of the advance warning system (col. 7, lines 19-22).

Claims 10, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Udofot, 5,005,004.

With regard to **claim 10**, Udofot teaches:

A portable advance warning system for use in warning drivers of oncoming vehicles of an upcoming, unexpected road hazard comprising:

a housing (13);

a lamp mounted to the housing (col. 4, lines 2-6);

a switch means (SW2, Fig. 2, col. 8, lines 103) mounted on the housing and connected to the lamp for activating and deactivating the lamp;

an electronic control means (Fig. 2) mounted to the housing and connected to the lamp for controlling the characteristics of the light emitted by the lamp; The examiner finds that Applicant's electronic control means performs the same function as Udofot circuit in figure 2; and

a power supply (col. 8, line 3-4) for providing power to the system.

With regard to **claim 11**, Udofot teaches the electronic control means comprises means to cause the lamp to flash on and off at a pre-determined frequency (col. 8, lines 43-46).

With regard to **claim 13**, Udofot teaches the pre-determined frequency comprises a cadence (col. 4, lines 16-21).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adell in view of Reppas et al., US 5,598,164.

With regard to **claims 4 and 5**, Adell teaches the claimed invention except for explicit teaching of the pre-determined frequency varies depending on the length of time the lamp has been activated, and the pre-determined frequency is inversely proportional to the length of time the lamp has been activated.

However, Reppas et al. teach the pre-determined frequency varies depending on the length of time the lamp has been activated, and the pre-determined frequency is inversely proportional to the length of time the lamp has been activated (col. 6, lines 54-67, and col. 7, lines 1-12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Adell with the teachings of Reppas et al. for the purpose of providing variable warning depending upon the proximity of the adjacent object (col. 6, lines 55-57).

Claim 12, is rejected under 35 U.S.C. 103(a) as being unpatentable over Udofot in view of Reppas et al..

With regard to **claim 12**, Udofot teaches the claimed invention except for the pre-determined frequency can be varied depending on the distance from the road hazard,.

Reppas et al. teach the pre-determined frequency can be varied depending on the distance from the road hazard (col. 6, lines 54-67, and col. 7, lines 1-12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Adell with the teachings of Reppas et al. for the purpose of providing variable warning depending upon the proximity of the adjacent object (col. 6, lines 55-57).

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Udofot in view of Reppas et al., as applied to claim 12 above, and further in view of Adell.

With regard to **claims 14 and 15**, neither Udofot nor Reppas et al. teach an in-use indicator light connected to the switch means and to the electronic control means for indicating when the advance warning system is operating, and the color of light emitted by the lamp is selected from the group of colors consisting of fuchsia and pink

However, Adell teaches an in-use indicator light connected to the switch means and to the electronic control means for indicating when the advance warning system is operating (col. 6, 55-57), and the color of light emitted by the lamp is selected from the group of colors consisting of fuchsia and pink (col. 7, 66-68, col. 8, lines 1-4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Udofot as modified by Reppas et al. with the teachings of Adell for

Art Unit: 2836

the purpose of informing the driver that the front signaling system is operating (claim 14) and to distinguish the lights from other vehicle and traffic signals (claim 15).

Pertinent Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US. Patent Nos. 4,807,101, -- 5,225,827, -- 5,515,026, -- 5,699,057, -- 5,815,073, and 6,118,401 which disclose vehicle waning systems, US Patent Nos. 5,565,839, and 5,633,565 which disclose portable flasher units.

Communication with the PTO

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon Polk whose telephone number is 703-308-6257. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-305-7723 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

August 19, 2002

Sharon Polk

Patent Examiner – Art Unit 2836


BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000